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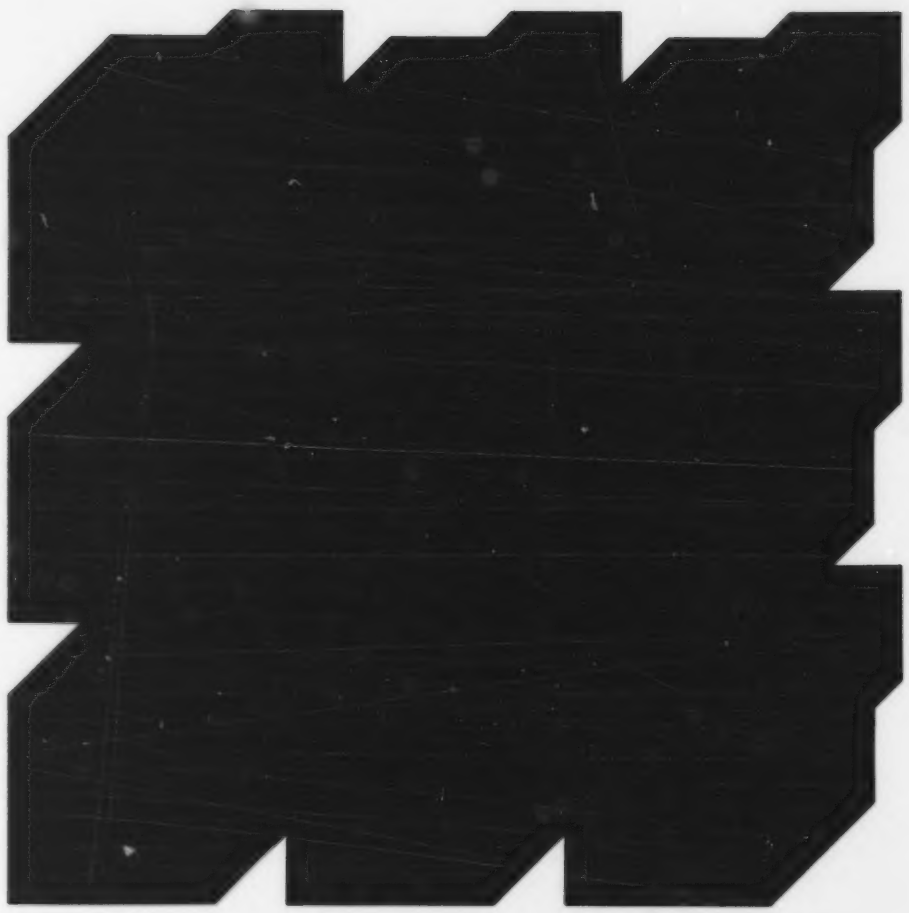

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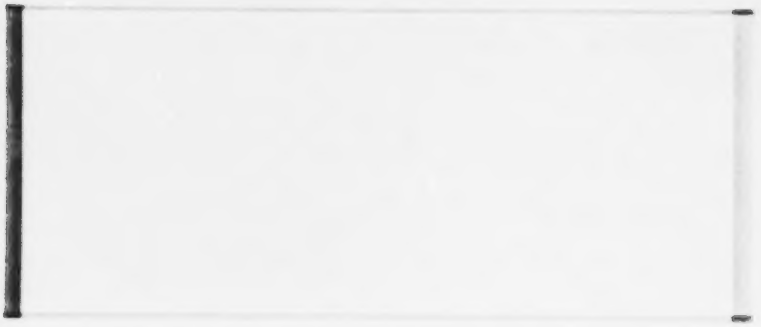

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DISCUSSION PAPER NO. 307

The Role and Economic Implications of the Canadian Dividend Tax Credit

by Glenn P. Jenkins

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RÉSUMÉ

Ce document résume l'évolution du crédit d'impôt pour dividendes au Canada jusqu'à sa forme actuelle, et évalue l'incidence relative qu'a eue cette mesure fiscale sur la demande de formes diverses d'actifs financiers. L'auteur étudie également le rôle de ce crédit d'impôt sur le développement des actions privilégiées. Il montre que le crédit d'impôt pour dividendes utilisé conjointement avec les actions privilégiées a élevé le niveau des remboursements d'impôt des sociétés canadiennes avec des pertes fiscales.

Le crédit d'impôt pour dividendes donne lieu actuellement à des pertes de revenu d'environ 1 milliard de dollars par année. Près des deux tiers de cette somme sont attribuables aux dividendes partagés aux détenteurs d'actions privilégiées. Outre ces coûts, la disposition permettant l'exemption d'impôt pour les dividendes intersociétés accorde un avantage fiscal plus grand que nécessaire. Le montant de la perte de revenu occasionnée par cette mesure fiscale, dans sa forme actuelle, a été de près de 230 millions de dollars en 1983.

Mais le coût économique le plus grave engendré par le crédit d'impôt pour dividendes se trouve dans l'effet de distorsion qu'il produit sur le choix des avoirs détenus dans les portefeuilles d'investissement des individus et des sociétés. Nous estimons que la perte économique engendrée par le risque que crée cette distorsion se chiffre approximativement à 500 millions de dollars par année.

Nous présentons un certain nombre de recommandations en vue d'améliorer le régime fiscal du Canada à cet égard. Le meilleur moyen serait de remplacer le crédit d'impôt pour dividendes par un régime d'impôt par anticipation applicable aux sociétés. Sous un tel régime, le crédit d'impôt accordé au niveau du titulaire d'actions serait toujours égal ou inférieur aux impôts qui ont été effectivement payés au niveau de la société. Cette proposition soulève des difficultés dans les cas où il faudrait également accorder aux résidents des Etats-Unis ayant des investissements au Canada un remboursement égal à cet impôt par anticipation. Si, pour ce motif, la proposition n'était pas acceptable, il est alors recommandé que le crédit d'impôt pour dividendes soit réduit de 33 et 1/3 à 25 %; mais en même temps, il faudrait éliminer l'impôt sur le partage des dividendes. Cette dernière proposition a été faite récemment par le ministre des Finances, dans son Budget du 26 février 1986. Il est en outre recommandé que le crédit d'impôt pour dividendes ne soit pas applicable au partage de dividendes dans le cas de toute société dont la propriété est en grande partie détenue par le gouvernement fédéral ou un gouvernement provincial.

ABSTRACT

This paper summarizes the evolution of the dividend tax credit in Canada to its present form and evaluates the relative impact that this tax provision has had on the demand for alternative financial assets. Its role in the development of preferred shares in Canada is also studied. It is shown that the use of the dividend tax credit, in conjunction with preferred shares, has resulted in a degree of tax refundability for Canadian corporations with tax losses.

The revenue cost of the dividend tax credit is currently about $1.0 billion a year. Nearly two thirds of this amount is attributable to dividends paid on preferred shares. In addition to these costs, the provision that allows for the exemption from taxation of intercorporate dividends provides a greater than needed tax benefit. The amount of excess revenue lost because of the present design of this provision was approximately $230 million in 1983.

The most serious economic cost created by the dividend tax credit is its distorting impact on the choice of assets being held in the investment portfolios of individuals and corporations. It is estimated that the economic loss from the risk created by this distortion amounts to approximately $500 million a year.

A number of recommendations are made to improve the Canadian income tax system in this regard. The preferred option would be to change the dividend tax credit to an advance corporate tax system. Under such a system, the tax credit given at the shareholder level would always be equal to or less than the taxes that have actually been paid at the company level. This proposal runs into difficulty if United States residents owning investments in Canada were also given a refund equal to the advance corporate tax. If for this reason this proposal was not acceptable, then it is recommended that the dividend tax credit be reduced from 33 1/3% to 25%. At the same time the dividend distributions tax should be eliminated. This latter proposal has been made recently by the Minister of Finance in his Budget of February 26, 1986. In addition, it is recommended that the dividend tax credit should not be applied to dividend distributions of any corporation that is substantially owned by either the federal or provincial governments.

I. INTRODUCTION

While attempts to eliminate the double taxation of corporate dividends in Canada began in the late 1940s and have continued to this day, earlier tax systems had already achieved full integration of corporate personal taxes. From 1917 until 1919, for example, corporations and individuals were subject to the same base income tax rate of 4 percent (though incomes in excess of $6,000 were subject to a graduated surtax). Corporations were treated as a stage through which the income stream of individuals flowed; so corporate dividends were excluded from the taxable base of shareholders. Retained income in the corporation could not be used to avoid taxes since shareholders were subject to surtaxes on their share of undistributed profits (McNair 1978).

In 1926 integration ended. A graduated tax structure replaced the basic personal income tax rate. Thenceforward, corporate income was taxed twice: at the corporate level and when dividends were distributed to shareholders. Dividends received by shareholders had to be included in their taxable income and were subject to the full marginal tax rate of the recipient. By contrast, inter-company dividends and capital gains were exempt from taxation. These changes created incentives among shareholders to accumulate profits in corporations, convert these profits to capital gains, and thus avoid personal taxation and achieve the tax-free realization of income. Various amendments were passed during the subsequent decades to deal with this problem, but they proved largely ineffective (McNair 1978:539-543).

The separation of corporations and individuals as taxable entities, and the taxation of corporate profits at both stages of taxation went unchallenged until 1949. At that time a combination of high personal and corporate tax rates led to the adoption of the dividend tax credit--the first step to eliminate the double taxation of corporate income (Moore 1953).

The dividend tax credit was introduced in 1949 to achieve three goals. First, it was designed to provide full relief from double taxation, particularly for the small incorporated firm competing against unincorporated businesses. Second, the plan's architects wanted to encourage companies to switch from debt to equity financing. Finally, since the credit was reserved for Canadian shareholders of Canadian firms, it promoted the ownership of Canadian businesses by Canadians.

The original provision allowed 10 percent of the dividends received on common shares from Canadian tax-paying corporations to be credited against the personal income taxes of Canadian residents.[1] At the same time, the corporate income tax rate for small firms was reduced to 10 percent from the normal corporate tax rate of 33 percent. These measures, as originally planned, provided partial relief from double taxation, especially for small corporations. In 1953, the Dividend Tax Credit (DTC) as well as the corporate tax rate for small firms was increased to 20 percent. The DTC structure of 1953 remained unmodified until 1972. Table 1 compares the DTC mechanism as it applied to small and large firms from 1949 to 1952, and 1953-1972 (Table 1).

TABLE 1

DIVIDEND TAX CREDIT: 1949-1952, 1953-1972

		1949-1952		1953-1972	
		1 Small* Corps.	2 Large Corps.	3 Small** Corps.	4 Large Corps.
1.	Corporate Income	$100	$100	$100	$100
2.	Corporate Income Tax Rates				
	1949 - 10%	10			
	- 33%		33		
	1953 - 20%			20	
	- 33%				33
3.	Dividend (1 - 2)	90	67	80	67
4.	Personal Income Tax (50%)				
5.	Personal Income Tax on Dividends (.5 x #3)	45	33.50	40	33.50
6.	Deduct Dividend Tax Credit				
	1949 - 10% of #3	9	6.7		
	1953-1972 - 20% of #3			16	13.4
7.	Net Personal Income Tax Payable (#5-#6)	36	26.80	24	20.10
8.	Total Tax Burden (#2 + #7)	46	59.80	44	53.60
9.	Compare Tax Payable on $100 Distributed Free of Corporate Income Tax	50	50	50	50

* Small corporations earned less than $10,000
** Small corporations earned less than $20,000

Although businessmen welcomed the dividend tax credit, it was becoming clear, especially after the 1953 changes, that the law provided more relief to high income taxpayers (Moore, 1953). Table 2 row 9 shows that as the shareholder's marginal tax rate rises, the additional personal income tax paid on dividends falls. By the mid-1950s, observers were questioning whether the dividend tax credit was achieving its original goals of encouraging investments in Canada and reducing debt financing. Canadian firms continued to rely more heavily on debt than on equity financing, and corporations did not issue large new blocks of shares. The dividend tax credit appeared to be insufficient to overcome the Canadian investor's preference for purchasing debentures or fixed earning securities rather than stocks (Perry 1955:346).

The flaws in the system became more evident during the late 1950s and early 1960s. In the mid-1960s, the Canadian government began a major review of the system for the taxation of dividends. The Canadian Royal Commission on taxation (Carter Commission) concluded that the dividend tax credit favored high-income taxpayers because at that time it did not require a gross-up of taxable dividends to be increased by the amount of the tax credit. Moreover, the exemption of capital gains encouraged corporations to convert undistributed earnings into untaxed capital gains through "surplus stripping." Finally, the Carter Commission recognized that the dividend tax credit was granted without consideration of whether the firm had paid corporate taxes to cover the credit.

TABLE 2

EFFECTS OF DIVIDEND TAX CREDIT ON
SHAREHOLDERS OF DIFFERENT MARGINAL TAX

Rates (1953-1972)

Shareholder	1	2	3
1. Corporate Income	$100	$100	$100
2. Corporate Income Tax (33%)	33	33	33
3. Dividends Received (#1 - #2)	67	67	67
4. Shareholder Marginal Tax Rate	15%	50%	65%
5. Personal Income Tax on Dividends (#4 x #3)	10.05	33.50	43.55
6. Deduct Dividend Tax Credit (.20 x #3)	13.40	13.40	13.40
7. Net Income Tax Payable (#5 - #6)	-3.35 (no refund)	20.10	30.15
8. Total Tax Burden (#2 + #7)	33 (33%)	53.10 (53.10%)	63.15 (63.15%)
9. Differential Burden (#8 - #4)	18%	3.1%	-1.85%
10. Compare Tax Payable on $100 Distributed Free of Corporate Income Tax	15	50	65

The Carter Commission's suggestion to tax capital gains fully in order to achieve integration between corporate and personal taxes was rejected by the business community. Small business owners, who paid less tax under the existing system than the proposed one where dividends would have been taxed at the personal marginal tax rate (see Table 1, Col. 3), were particularly incensed by the proposals. The scheme, therefore, was modified to achieve only partial integration.

The income tax legislation of 1972 changed the way the dividend tax credit was applied. Active business income earned by Canadian controlled private corporations was now subject to a preferred rate of 25 percent (up to a given cumulated level of retained earnings), rather than the full corporate rate of 50 percent. Investment income was taxed at the full corporate rate. In either case, the amendments raised the dividend tax credit rate from 20 percent to 33 1/3 percent of dividends received and required cash dividends received to be grossed-up by the full amount of the dividend tax credit, or by one third.[2]

The basic features of the dividend tax credit remained unchanged from 1972 until 1978 (Table 3). Amendments introduced in 1978 increased the dividend gross-up to 50 percent of dividends received after 1977. The federal tax credit was increased from 20 percent to 25 percent of the value of dividends after being grossed up, which had the overall effect, when including the impact on provincial taxes (assumed to be 44 percent of federal taxes), of providing a tax credit equal to 36 percent of the value of the grossed-up dividends (Table 4).

TABLE 3

DIVIDEND TAX CREDIT: 1972 - 1977
FOR LARGE CORPORATIONS

	1972	1973	1974	1975	1976/7
1. Corporate Income	$100	$100	$100	$100	$100
2. Corporate Income Tax Rates	50%	49%	48%	47%	46%
3. Corporate Income Taxes	50	49	48	47	46
4. Dividends Received (#1 - #3)	50	51	52	53	54
5. Dividend Gross-Up (#4 + 1/3 x #4)	66.66	68	69.33	70.66	72
6. Personal Income Taxes Due on #5 (.50 x #5)	33.33	34.00	34.67	35.33	36.00
7. Deduct Dividend Tax Credit					
Federal (4/5)	13.33	13.60	13.87	14.13	14.40
Provincial (1/5)*	3.33	3.40	3.46	3.53	3.60
(1/3 x #4)	16.66	17.00	17.33	17.66	18.00
8. Net Personal Income Taxes Payable (#6 - #7)	16.66	17.00	17.33	17.66	18.00
9. Total Taxes (#3 + #8)	66.66	66.00	65.33	64.33	64.00
10. Compare Tax Payable on $100 distributed Free of Corporate Income Taxes	50	50	50	50	50

*It is assumed that provincial taxes are 25 percent of Federal taxes.

TABLE 4

DIVIDEND TAX CREDIT 1978-82

	Large Manufacturing Corporations	Small Corporations
1. Corporate Income	$100	$100
2. Corporate Income Tax Rate	46%	25%
3. Corporate Income Taxes	46	25
4. Dividends Received (#1 - #3)	54	75
5. Dividend Gross-up (#4 + 1/2 #4)	81	112.50
6. Personal Income Tax Rate	50%	50%
7. Personal Income Tax on #5	40.50	56.25
8. Deduct Dividend Tax Credit		
(a) Federal .2267 of #5	20.25	28.18
(b) Provincial .44 of 8(a)*	8.91	12.38
Total:	29.16	40.51
9. Net Personal Income Tax Payable (#7 - #8)	11.34	15.74
10. Total Taxes (#3 + #9)	57.34	40.74
11. Compare Tax Payable on $100 Distributed Free of Corporate Income Tax	50	50

*It is assumed that the average provincial tax rate during that period was 44 percent of Federal Tax.

These changes did not create the flood of equity financing that was predicted, but they did create a number of tax planning opportunities that lead both to inequities as well as inefficient allocation of capital investment. In his budget address of November 12, 1981, the Minister of Finance stated that the existing dividend tax credit produced "significant anomalies, inequities, and economic inefficiencies."[3]

One of the principal causes of its anomalies, inequities, and economic efficiencies was its enrichment in 1978. In particular, for the owner of a small business corporation the tax credit received on the payment of dividends was now greater than the maximum underlying tax that could be paid by the corporation. To correct for this, a special dividend distributions tax was introduced in 1982 that would levy a 12 1/2 percent tax on the dividends actually paid from small incorporated businesses to their shareholders. In 1984, further amendments modified this provision so that it would apply to dividends paid from the income of Canadian controlled private corporations (CCPC) that had benefited from the low tax rate. By making these changes, the enriched dividend tax credit could be retained for the shareholders of large CCPCs and public corporations where the dividend tax credit was less than the underlying corporate tax paid, while at the same time for small corporations (paying tax at the maximum rate of 25 percent corporation tax), the addition of the 12.5 percent dividend distribution tax meant that they now theoretically would pay total taxes equal to the DTC received by their shareholders.

Finally, in the Budget of February 26, 1986 the Minister of Finance has proposed to return the structure of the dividend tax credit after 1986 to the way it was prior to 1978. The dividend gross-up will be equal to 1/3 of dividends paid and the dividend tax credit will be equal to 25 percent ($16\ ^{2}/_{3}$ percent federal, $8\ ^{1}/_{3}$ percent provincial) of grossed up dividends (Budget Papers (1986), p.37).

II. POLICY ISSUES ARISING FROM THE DIVIDEND TAX CREDIT

1. SUPER-INTEGRATION AND UNDER-INTEGRATION. The imputation systems in effect since 1972 and 1978 have specified a gross-up of 1/3 and 1/2 respectively and thus assume a general corporate tax rate of 25 percent and 33 1/3 percent to give full integration. In the absence of a dividend distributions tax, if the corporate income tax rate is below or above the presumed 33 1/3 percent rate, super or under-integration will result. Complete relief from double taxation occurs only if the firm is subject to a 33 1/3 percent income tax rate. If corporations are subject to an income tax rate that exceeds 33 1/3 percent, the combined taxes of the firms and shareholders will be higher than if the shareholder has earned the income directly. This under-integration or double taxation (illustrated in Table 4, Col. 1 for the cases of large corporations) creates an additional tax burden over and above the shareholders' marginal personal income tax rate.

From Table 4, Col. 1, we see that if a large manufacturing corporation in Canada earns $100 of corporate income, then a maximum corporate income tax of $46 will be paid. When the corporation pays dividends, the individual (if in the 50 percent marginal tax bracket) would have additional tax liability of $40.50 before deducting the dividend tax credit of $29.16. The net tax liability is an additional $11.34, bringing the total taxes paid on the initial $100 of income to $57.34.

From this hypothetical calculation we see that, if the corporation pays full tax, the tax burden on this income would be higher if it was earned within a corporation than if it was paid directly to the shareholders by an unincorporated business or through wages and salaries.

In Table 4, Col. 2, we see that during the period from 1978 to 1983, an owner of a small corporation receiving dividends would in fact pay a lower rate of total tax on income earned in a small corporation than would be paid if the income came from an unincorporated business or from wages and salaries. Suppose we again start with the corporation earning $100, then if it paid a tax rate of 25 percent the net of tax income available for dividends would be $75. The gross personal tax liability on this income if it were paid in the form of dividends would be $56.25. After deducting the dividend tax credit of $40.51 the net personal income tax payable is $15.74. The combined personal and corporate taxes paid on the initial corporation income of $100 is $40.74, an amount less than the $50 that would have been paid if this person had received the income directly.

The enrichment of the dividend tax credit in 1978, and the resulting over-integration that reduced the total tax burden on small corporations and their owners by 9.26 percentage points, stimulated a massive behavioral response from the small business community in Canada. From Table 5 we find that the number of small business corporations paying dividends rose during the period from 30,000 in 1977 to 101,000 in 1981, for an increase of 336 percent in just three years! In Table 5, Row 2, we find that the total dividend paid by small business corporations rose from $636 million in 1977 to $2,938 million for a total increase of 461 percent!!

TABLE 5

IMPACT OF OVERINTEGRATION IN 1978
ON DIVIDEND BEHAVIOR OF SMALL BUSINESSES

	1977	1978	1979	1980
Number of Small Business Corporations Paying Dividends	30,000	54,000	80,000	101,000
Total Dividends Paid By Small Business Corporations (Millions $)	636	1,446	2,474	2,934

(Source: Department of Finance)

From this information it would appear that the over integration of the dividend tax credit during the 1978 to 1983 period served primarily as a wage subsidy to the principal owners of the small business corporations. These people simply reduced the amounts they would

otherwise have received in wages and salaries from their corporations. This action caused corporate taxable income to increase and more corporate taxes to be paid. If the owners took their compensation in the form of dividends and received a dividend tax credit, they would have enjoyed a lower total tax burden than if they had been compensated only in the form of wages and salaries. The exact calculation of the proportion of one's compensation from a small business to take as salary and the proportion to take as dividends so as to minimize one's tax liability, quickly became part of the basic line of services offered by tax advisors in Canada.

The tax changes brought into effect in 1983 and 1984 are illustrated by the example on Table 6. For large corporations, except CCPCs, no change has taken place. All CCPCs enjoy the small business tax rate for the first $200,000 of income and hence also pay the dividend distributions tax on this income. For a small CCPC business, as shown in Col. 2, the dividend distribution tax of 12 1/2 percent of dividends paid serves to integrate the small business corporation with the tax position of the shareholder. The small business initially pays $25.00 in corporate income tax per $100 of taxable income and then a further $8.33 when it pays out dividends, giving a total of tax payments of $33.33 on every $100 of gross corporate income. At the shareholder level, an individual in the 50 percent tax bracket would pay a further $16.67 for a total of $50.00. Hence, the shareholder earning wages and salaries is indifferent between having it paid to him directly as wages and salaries or indirectly through corporate dividends.

Although the small business tax system is theoretically integrated with that of its shareholders, this is more likely to be the case for some types of income than for others. The shareholder should be indifferent between taking compensation in the form of salary or dividends, as the same amount of tax is paid in either case. However, if the corporation reinvests part of its after-tax current income, then only the initial corporate tax at

TABLE 6

DIVIDEND TAX CREDIT 1983 - PRESENT

	Large Manufacturing Corporations	Small Businesses	Small Businesses (Ontario)
1. Corporate Income	$100	$100	$100
2. Corporate Income Tax Rate	46%	25%	15%
3. Corporate Income Taxes	46	25	15
4. Dividends Paid	54	66.66	75.55
5. Dividend Distribution Tax 12.5% x #4	-	8.33	9.45
6. Dividend Gross-up (#4 + 1/2 #4)	81	100	113.33
7. Personal Income Tax Rate	50%	50%	50%
8. Personal Income Tax on #6	40.50	50.00	56.66
9. Deduct Dividend Tax Credit 33.3% of #6	27.00	33.33	37.74
10. Net Tax Payable	13.50	16.67	18.92
11. Total Taxes (#3 + #5 + #10)	59.50	50.00	43.37
12. Compare Tax Payable on $100 Distributed Free of Corporate Income Tax	50	50	50

a 25 percent rate is paid at the corporate level. A gain from the deferral of taxes is thus created if the individual's marginal tax rate is greater than 25 percent. In such a case, the present value of taxes paid (corporate + dividend distribution + personal tax) when the capital gains of the shares are realized or dividends are paid, will be smaller than if the individual were to pay taxes at his full personal rate when the small business initially earned the income.

In reality, most of the small business income in Canada is still not subject to a tax system that integrates the corporate and the personal income tax systems. In recent years, both the Provinces of Quebec and Ontario have enacted special provisions which lowered the tax rate on income from small business corporations. In the case of Ontario, some categories of small business pay zero provincial corporate taxes with the result that the corporate tax rate on income is only the federal rate of 15 percent. For example, a calculation of the total tax burden for an Ontario small business corporation in these categories is shown in Col. 3 of Table 6. In this case, $100 of corporate income is subject to a 15 percent federal corporation income tax and a further 9.45 percent of dividend distributions tax. The corporation's owners will then pay an additional 18.92 percent after deducting the dividend tax credit from the gross tax liability on the dividends. The total taxes paid on $100 of corporate income by both the corporation and its owners comes to 43.37 percent, as compared to 50 percent if the shareholders receive the income directly. The result is that for these corporations, over-integration is now at about the same level as it was between 1978 and 1983, before the enactment of the dividend distributions tax.

Over-integration also arises on income that Canadian corporations earn from their foreign investments. The Canadian tax system exempts the dividend income received by a Canadian parent corporation from its subsidiaries abroad if the parents own more than 10 percent of the subsidiary and if, in addition, the host country to the foreign investment has a tax treaty with Canada. When the parent corporation in turn pays out dividends, the Canadian shareholders receive a dividend tax credit on these dividends even though the ultimate source of this income was from abroad and has borne no Canadian corporation income tax. In cases where the foreign rate of taxation is less than that of Canada, then the tax treatment provided by the Canadian Government results in a net incentive for the Canadian shareholder to invest in a foreign enterprise through the use of a domestic parent with at least a 10 percent ownership in the foreign corporation. Hence, while the stated purpose of the dividend tax credit is to induce Canadians to increase their holdings of equity of Canadian corporations, there is a strong incentive for Canadians to hold shares of Canadian corporations which in turn invest this income abroad in companies located in low tax jurisdictions.

From 1972 to 1982, the nominal cost of the dividend tax credit has increased eleven-fold (Table 7). The effect of over-integration can be seen most dramatically by comparing the cost of the dividend tax credit in 1977 of $185 million as compared to its cost in 1980 of $864 million, an increase of over 4 1/2 times. While it should be understood that some underlying corporate tax was paid on the increased dividends

which flowed through the small business corporations, the subsidy element (over-integration) was equal to at least 25 percent of the additional taxes paid.[4] It is also interesting to note that the effect of the dividend distributions tax has been such that the estimated cost of the dividend tax credit has dropped approximately 30 percent between 1982 and 1983.

This evidence leads one to the conclusion that the dividend tax credit is more than a simple tax device to bring about the integration of the corporate and the personal tax system. In fact, it has become one of the favorite tax planning tools for the minimization of the overall tax burden of corporations and their shareholders.

2. PREFERRED SHARES, DIVIDEND TAX CREDITS, AND LOSS REFUNDABILITY. Net new equity in Canada has increased rapidly in recent years, often taking the form of preferred shares. These shares owe their existence primarily to the way they are treated for tax purposes including the eligibility of dividends from these shares for the dividend tax credit.

TABLE 7

GOVERNMENT REVENUE COST OF DIVIDEND TAX CREDIT 1972 - 1983
($ Millions)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983[2]
Dividend Tax Credits	163	198	229	263	277	297	867	1132	1420	1780	1975	1550
Taxes Levied on Gross-up of Dividends[1]	63	75	88	101	107	112	328	441	546	703	835	765
Net Cost[3]	100	123	141	162	170	185	539	691	864	1077	1140	785

1. Taxes levied on Gross-up of Dividends =
   Taxable Amounts of Dividends x Dividend Gross-up x Tax Rate
   Dividend Gross-up = 1/3 of dividends until 1977;
   1/2 of dividends after 1978

   The following average tax rates have been used:

1972-1976	29%
1977-8	27%
1979-80	28%
1981	28.5
1982-3	27.9

These tax rates are the average tax rates on all taxable income for those individuals claiming the dividend tax credit.

2. Estimates

3. This is the cost at the personal tax level. It is not the cost as compared to a fully integrated income tax.

Sources: Boadway, R.W. and Kitchen, H.M., Canadian Tax Policy, Canadian Tax Paper No. 76, Canadian Tax Foundation, 1984, p. 363 (1972-80).
Department of Finance, Government of Canada (1981 to 1983)

These financial instruments are hybrids having some of the same characteristics as debt while having other characteristics similar to those of common shares. Further, the mix of these characteristics can range all the way from instruments that are almost identical to debt, to others that have many of the characteristics of common stock. These can be of indefinite term with dividends that are subordinated to other interest obligations and perhaps are convertible into common shares.

A common feature of all types of shares is that their dividends are not deductible from the debtors' corporate taxes, but the creditor corporation receives the dividend tax free. For those types of preferred shares that are closer to debt instruments in their exposure to risk, the main driving force for their creation is the differential tax treatment of dividends and interest. For firms that expect to be in a non-taxable position over the immediate future there could be considerable advantages to issuing preferred shares rather than debt. This is particularly true for corporations in the manufacturing sector when they are undertaking a major investment. Because of the accelerated capital cost allowances given to manufacturing and processing investments, they are unlikely to be in a taxable position for a number of years. Resource companies are often found to be in a non-taxable position even though they are financially profitable.

Debt instruments provide an interest expense to the debtor. However, the value of this interest as a tax deduction expense could be zero or very low for corporations that are going to have little or no taxable income for a period of time. The tax advantages are greatly

enhanced for these corporations if they obtain financing by issuing preferred shares whose dividends are non-taxable in the hands of the purchasers and non-deductible as an expense by the issuers. When sold to a fully taxable firm, the net of tax value of the tax free dividends will be approximately twice that of an equal amount of interest receipts on which they would have to pay taxes. Hence, corporations with tax losses will be able to obtain more favorable terms for financing if they issue preferred shares and pay out dividends rather than issue debt and pay interest that they are not able to immediately deduct from taxable income, but which would be taxed in the hands of the lender.

This same attraction holds to a somewhat lesser degree for corporations that enjoy favorable tax rates. For example, small business income is taxed at 25 percent. These firms might find it advantageous to borrow funds in the form of preferred shares from other taxpayers that have higher tax rates. In this circumstance, giving up the interest deduction by a small business corporation has a tax cost of about 25 percent of the interest payments made, while if they were to borrow in the form of preferred shares, the creditor could get a benefit of up to 50 percentage points if it were a fully taxable public corporation. This means that the issuer could potentially have its cost of funds cut by a half before considering the value of the lost tax deduction for interest. Alternatively, if they sold these shares to taxable individuals, they would benefit by the amount of 33 1/3 percent dividend tax credit, before considering the value of the foregone deduction for interest. To the degree that the debtor can structure the preferred shares to make them have the same risk characteristics as debt it will receive the largest share of tax benefits associated with preferred shares.

Prior to 1978, preferred shares that had an explicit term to redemption of less than five years were also given the same tax concessions as other preferred shares. These term preferred shares had essentially all the characteristics of debt instruments. They usually had a very short term to date of redemption, received their dividends ahead of other shares and these dividends often had to be paid regardless of whether the corporate debtor made profits. In most cases the rate of dividends were set at a level such that the creditors received an amount approximately equal to the net of tax return they would have obtained if they had lent the money as debt.[5]

In 1978, the taxation rules applicable to preferred shares were changed in order to limit the ability of corporations to use the term preferred shares as an after-tax financing vehicle. The principle restriction placed on the specification of the preferred share was the period in which it would be redeemed. Generally it is the case that if the debtor has made a promise to redeem the share within five years of being issued the preferred share will be deemed to be a term preferred share and thus not eligible for tax exempt status on intercorporate dividend payments or for receipt of the dividend tax credit. However, an exception is given for firms that are in financial difficulty. Following the recession of 1983, a number of Canadian corporations could qualify for the issue of term preferred shares under this category.

The tax professionals also have been hard at work designing ordinary preferred shares in ways that reduce their unlimited term while keeping their tax eligibility as preferred shares. This is often done by expressing the rate of dividend initially as a percentage of the market interest rate, which is scheduled to increase over time. The first feature reduces the yield risk of a longer term instrument and the second feature provides an incentive for the debtor to redeem the shares after a relatively short period of time.

The Dividend Tax Credit also plays a key role in making the preferred shares attractive when both the debtor and creditor are corporations. When the creditor corporation receives tax free dividend income, its shareholders are still eligible for the full dividend tax credit on this income even though no taxes were paid. Hence, the combination of the non-taxability of intercorporate dividends with the dividend tax credit that accompanies dividends paid to individuals, ends up providing tax loss refundability at a tax rate of 33.3 percent. In other words, the tax losses that would have otherwise accumulated inside the debtor corporation (if it had obtained funds through debt financing) are now first transferred to a creditor corporation. If the intercorporate dividends are then paid out to the shareholders of the creditor corporation, a dividend tax credit is given at a rate of 33.3 percent.

In the late 1970's, term preferred shares became a particularly attractive way of financing public sector enterprises. PetroCanada, The Canadian Development Corporation and other "taxable" Crown Corporations issued preferred shares as a way of obtaining low cost financing. Because of the capital structure of these corporations and their indifference to the generation of taxable income, they are ideally positioned to issue preferred shares. In addition to not being in a taxable position most of the time, they also generally carry a government guarantee on these shares so that the normal risk associated with preferred shares is all but eliminated. By providing the Crown Corporations with this rather artificial legal characterization of being taxable, these enterprises have been able to circumvent the normal budgetary processes. They can obtain funds at a lower than the normal cost of debt by selling off their tax losses, even though there is little or no prospect that they will ever be in a taxable position.

The abuse of this provision by Crown Corporations was carried to its extreme in May and June of 1984 when the provincial governments of Manitoba and British Columbia set up "taxable corporations" to hold assets which were structured never to earn a profit. By guaranteeing the repayment of the preferred shares, these provincial governments were able to issue some $400 million of preferred shares at rates of 9 1/2 percent, well below the market interest rate at the time for new debt issues maturing in five and eight years. While commercial businesses use the preferred share option to flow out taxable losses, the provincial governments were simply using this provision to get a direct subsidy to finance provincial government expenditures.

From Table 8 we can see the role that preferred shares have played over the years in financing investments in Canada. These values only apply to publically listed financing. From 1972 to 1978, the share of total financing rose to the point where new issues of preferred stock were equal to five times the amount of new common stock. With the new rules in 1978 restricting the tax preference given to term preferred shares, the amount of preferred shares issued dropped from 50 percent to 30 percent of total new issues of bonds and stocks and hovered around that same value through to 1983. In 1984 we find that the quantity of new issues of preferred shares have increased again and have amounted to 46 percent of total new issues of bonds and stocks.

In order to get an approximate estimate of the impact that preferred shares are having on the utilization of tax losses, let us assume that all of the new issues of preferred stock issued after 1979 were still outstanding by 1983. If that were the case, then the total amount of new public issues of preferred shares would be equal to approximately $13.4 billion. Over this period, the average corporate interest rate on five year securities was about 14 percent, hence, the potential savings through the reduction of interest rates for non-taxable companies, would be between 1/2 and 1/3 of this rate per year. Considering only the new public issues of preferred stock since 1979, we find that the tax value of the losses transferred out of debtor corporations through the use of preferred shares has amounted to between $625 and $938 million per year. Expressed in another way, we could say

TABLE 8

NET NEW ISSUES OF CORPORATE BONDS AND STOCKS

ALL FIRMS
($ Canadian Million - Par Value)

Year	Corporate Bonds		Preferred Stock		Common Stock	
	$	%	$	%	$	%
1962	433	58	64	8	257	34
1963	691	107	49	8	-96	-15
1964	787	72	38	3	269	25
1965	1335	75	149	9	289	16
1966	970	63	177	12	388	25
1967	831	65	180	14	269	21
1968	725	57	122	9	436	34
1969	812	45	143	8	851	47
1970	1503	81	101	5	251	14
1971	1870	84	111	5	230	11
1972	1582	72	199	9	420	19
1973	1531	71	84	4	527	25
1974	1800	70	475	18	318	12
1975	2826	69	710	17	547	14
1976	3991	76	684	13	591	11
1977	5067	62	2445	30	698	8
1978	4639	40	5726	50	1097	10
1979	2772	40	1648	30	2773	40
1980	3696	41	2580	28	2812	31
1981	6065	46	4224	32	2916	22
1982	4423_r	47	4788	30	2173	23
1983	2720_r	22	2345_r	19	7338_r	59
1984	2987_r	27	4898_r	45	3033_r	28

Source: Bank of Canada, Bank of Canada Review,
Period 1984-1974: March 1985
Period 1973-1962: December of each year.

that the allowance of preferred stock has had approximately the effect of providing immediate refunds of between $625 and $938 million per year for tax losses. This value is a serious underestimation as it ignores private placements of preferred shares that are likely to be a large proportion of total issues. This involves a very substantial degree of tax loss refundability in the Canadian tax system that has been all but ignored in the public debate on tax policy issues.

If Canada operated with an advance corporate tax on dividends paid that was later credited to the shareholder, then the attractiveness of issuing preferred shares would be reduced dramatically. In such a situation, even if the dividends earned by the creditor corporation were not taxable in the hands of corporations, an advance corporate tax would be levied when the income was paid out to the shareholders in the form of dividends. However, this is not the case in Canada where the dividend tax credit is paid regardless of whether or not taxes have been paid by the corporation. Hence, the tax free dividends that flow into the creditor corporation can in turn be paid out to its shareholders, who will enjoy the same benefit of the dividend tax credit as if the dividends were paid from income that had been taxed at the corporate level.

III. IMPACT OF DIVIDEND TAX CREDIT ON DEMAND FOR ALTERNATIVE FINANCIAL ASSETS

There is general agreement that the capital market of Canada is well integrated into both the North American capital market as well as that of the rest of the developed free world. At the same time, the Canadian tax system is almost unique in that it provides a dividend tax credit to shareholders that is not tied to actual tax payments being made at the corporate level. The central economic question is, how does the dividend tax credit affect the return to shareholders and how does it alter the relationship between the returns to different types of assets?

In Table 9, Rows 1, 2 and 3, different net of personal tax rates of return are specified for three classes of Canadian financial assets: long-term corporate bonds, common stocks, and preferred shares.

These investments are also examined according to the ways in which they might be held. First, these assets may be held by the individual in a pension fund. Second, the assets could be held by the the individual in his private investment portfolio. Third, the individual might own part of a corporation that, in turn, holds some financial assets.

TABLE 9

NET OF TAX RETURNS OF CANADIAN AND U.S. INVESTORS IN ALTERNATIVE CANADIAN FINANCIAL ASSETS

	Pension Fund	Individual	Corporation
Canadian Investor:			
1. Corporate Bonds	$i(1-tp^*)$	$i(1-tp)$	$i(1-tc)(1-3/2[tp-DTC])$
2. Common Stock	$(r_e+g)(1-tp^*)$	$r_e(1-3/2(tp-DTC))+g(1-1/2tp)$	$(r_e+g(1-1/2tc)(1-3/2[tp-DTC])$
3. Preferred Shares	$r_p(1-tp^*)$	$r_p(1-3/2(tp-DTC)$	$r_p(1-3/2[tp-DTC])$
American Investors:			
4. Long Term Bonds	$i(1-tp^*u)$	$i(1-tpu)$	$i(1-tcu)(1-tpu)$
5. Common Stock	$(r_e(1-tw)+g)(1-tp^*u)$	$r_e(1-tpu)+g(1-.4tpu)$	$(r_e[1-tcu]+g[1-(.4)tcu])(1-tpu)$
6. Preferred Shares	$r_p(1-tw)(1-tp^*u)$	$r_p(1-tpu)$	$r_p(1-tcu)(1-tpu)$

Where:

i = nominal interest rate on corporate bonds

r_e = the rate of dividends on common shares

g = is the rate of capital gains on common shares

rp = the rate of dividends on preferred shares

tp^* and tp^*u = the effective rates of personal tax paid on income earned in a pension fund in Canada and the U.S., respectively

tp and tpu = the rates of personal income tax paid by individuals in Canada and the U.S., respectively

tc and tcu = the rates of corporate income tax paid on investment income in Canada and the U.S., respectively

tw = the effective tax rate of withholding tax by Canada on dividends paid to foreigners. Because individuals and corporations in the U.S. can credit these tax payments against U.S. taxes on this income, hence, tw does not appear in the expressions for the net of tax rate of return for bonds and equities owned by American corporations or individuals

The same set of alternatives are set out in Rows 4, 5 and 6 for an American investor who holds these same three Canadian assets, either in a pension fund, an individual portfolio, or indirectly by owning shares in a corporation which owns these assets.

Let us start our analysis by assuming that the Canadian nominal interest rate is set as a fraction or multiple of interest rates in the U.S. or the international capital market (LIBOR). We can also assume that the nominal interest rates received by a pension fund, an individual and a corporation are identical. Given that the return on interest bearing bonds is i, the dividend rate on common stocks is r_e, the rate of capital gain on common stock is g, and the rate of dividend in preferred shares is rp, we can calculate the net of tax rate of return earned by the ultimate owners if these financial assets are held by a pension fund, an individual portfolio, or by a corporation. The expressions are given in Table 9.

With the expressions in Table 9, we can calculate what would be the minimum gross of tax rate of return that the pension fund, the individual, and the corporation must earn from common stock and preferred shares in order to obtain a net of tax return equal to what they would earn from the holding of interest yielding bonds. In each case, the net of tax rate of return for preferred shares and common shares is set equal to the net of tax return on corporate bonds and the expression is solved for re, g, and rp.

In Table 10, a set of calculations are made assuming the nominal rate of interest available on corporate bonds is 10 percent (Row 1), and the values for the various parameters are as follows: The effective personal tax rate on income generated in a pension fund in Canada (t*p) and the United States (tp*u) is assumed to be 30 percent, the marginal tax rate for the individual in Canada (tp) and in the U.S. (tpu) is assumed to be 50 percent and the corporate tax rates in Canada (tc) and the United States (tcu) equal to 50 percent. The dividend tax credit (DTC) is equal to 33.3 percent, the Canadian withholding tax on interest is equal to zero, while the withholding tax (tw) on dividends going to the U.S. is 10 percent. Finally, it is assumed that half of the gross of tax return to common stock is realized in the form of capital gains (g).

While recognizing that differential country risk will make the equilibrium nominal interest rate in Canada diverge from the equilibrium interest rate in the United States, let us assume for the purposes of this study that the nominal interest rate is identical in both countries and equal to 10 percent. This assumption changes none of the following results so long as there is a fixed relationship between Canadian and U.S. interest rates. In the calculations in Table 10, we start by asking what would be the net of tax yield on corporate bonds if they were held in a pension fund, by an individual, or by a corporation. From Row 2 we find that the net of tax yield under these assumptions would be 7 percent in a pension fund, 5 percent if held by an individual, and 3.75 percent

TABLE 10

REQUIRED GROSS OF TAX RATES OF RETURN
ON COMMON STOCK AND PREFERRED SHARES
IF THE YIELD ON CANADIAN CORPORATE BONDS
IS DETERMINED IN THE
INTERNATIONAL CAPITAL MARKET

	Pension Fund	Individual	Corporation
Canadian Investor:			
1. Yield Gross of Tax Corporate Bonds	i = 10	i = 10	i = 10
2. Net of Tax Yield Corporate Bonds	= 7.0	= 5.0	= 3.75
3. Gross of Tax Yield Required on Common Stock	re = 5.0 g = 5.0 Total 10.0	= 3.33 = 3.33 = 6.66	= 2.85 = 2.85 = 5.70
4. Gross of Tax Yield Required on Preferred Shares	r_p = 10	= 6.6	5.0
American Investor			
1. Yield Corporate Bonds Gross of Tax	i = 10	i = 10	i = 10
2. Net of Tax Yield Corporate Bonds	= 7.0	= 5.0	= 2.5
3. Gross of Tax Yield Required Common Stock	re = 5.26 g = 5.26 Total 11.52	= 3.85 = 3.85 = 7.70	= 3.87 = 3.87 = 7.70
4. Gross Yield Required on Preferred Shares	r_p = 11.11	= 10	= 10

if held by corporations. This tells us that the net yield at maturity of a corporate bond would be highest if the individual were to have his interest-bearing investments held by his pension fund. We now estimate in Rows 3 and 4 what the gross of tax rates of return would have to be on both common stock and preferred shares if the net of tax returns were to equal the returns obtained on corporate bonds held by the pension fund, directly by an individual, and through a corporation, respectively.

In the case of the pension fund, the gross of tax return from common shares would have to be 10 percent for the pension fund to be as well off holding common shares as it would be holding corporate bonds yielding 7 percent. The individual who received just 5 percent net of tax from a corporate bond would be equally as well off if he earned 6.66 percent gross of tax from common stock. Finally, if the common stock were held by a corporation, the corporation would have to obtain a gross of tax return of 5.70 percent from holding common stock in order that its shareholders could get a net return of 3.75 percent.

In Row 4, we examine the situation for preferred shares. The pension fund would have to receive a dividend rate on preferred shares of 10 percent in order to be as well off as it is holding corporate bonds. For individuals the gross of tax rate of return would need to be 6.66 percent for them to be as well off as holding bonds yielding 10 percent of tax. For the corporation as long as the preferred shares yield 5 percent gross of tax, they would be as well off as holding corporate bonds yielding 10 percent gross of tax.

These comparisons allow us to indicate the relative mix of the different types of Canadian financial assets these groups will hold. Clearly, corporate bonds yield the ultimate owner the highest return if they are held in pension funds. At the same time, the required gross of tax return on common stock is highest if it is held in pension funds and lowest if it is held by a corporation. The required rate of return on common stocks held by individuals, 6.66 percent, is slightly higher than the required rate if held by a corporation, 5.70 percent. In the case of preferred shares, the pension fund would require a rate of return of 10 percent to be indifferent between holding preferred shares and corporate bonds. Individuals holding preferred shares directly would require a rate of return of 6.66 percent to be indifferent between holding a preferred share and a 10 percent corporate bond. On the other hand, taxable corporations require a gross of tax rate from preferred shares of only 5 percent to be indifferent between holding them and corporate bonds yielding 10 per cent.

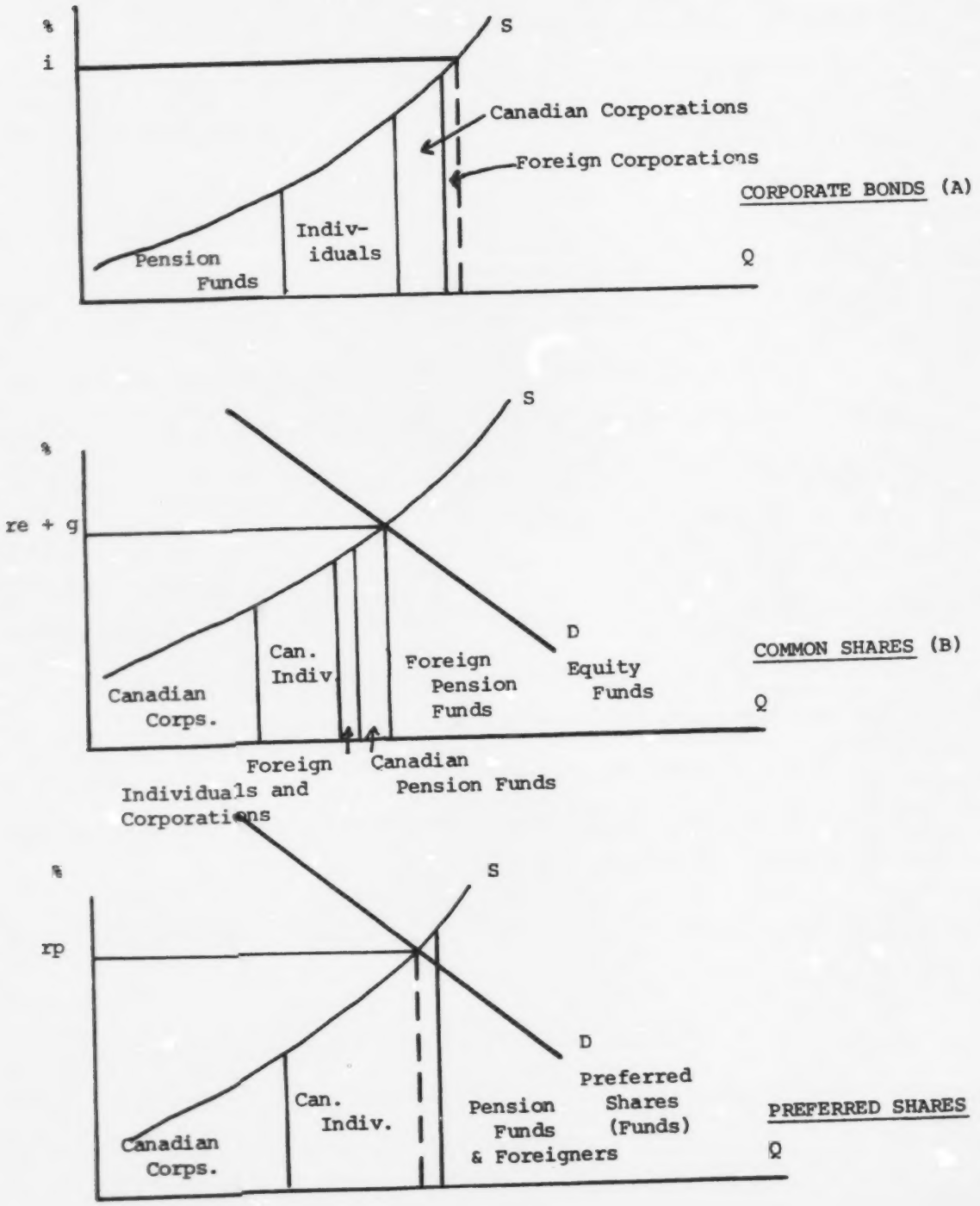
We can conclude from this analysis that the ultimate owners of the investments would be best off holding corporate bonds inside a pension fund. As the amount one can hold in a pension fund is restricted, the next best alternative is to hold such bonds in an individual portfolio. The worst alternative is to own bonds indirectly by owning shares of large corporations that have a portfolio of bond investments. This is illustrated by Panel A of Figure 1.

Portfolio investments are made by pension funds, individuals and corporations. From the pattern of financial asset distribution we see how the suppliers of funds (demanders of securities) interact with the demanders of funds (suppliers of financial assets) so that the suppliers of funds get the highest yield while the suppliers of securities get the highest price for their financial assets. In the case of common stock (Panel B, Figure 1), the rational supplier of the stock would first try to sell it to corporations because the required yield would be lowest there. However, as corporations are simply a conduit for the holding of assets by the ultimate savers, we would expect that there would not be sufficient funds in the corporations to hold the entire portfolio of common stock. In such a case, the suppliers of these assets would have to raise the yield in order to induce individuals to hold the shares. If individuals did not hold sufficient funds outside their pension funds to absorb all the supply of common stock, then the marginal investors would be the pension funds. When this is the case pension funds will require a gross of tax rate of return net of risk of at least the yield they can get on corporate bonds.

If we bring American investors into the picture, we have the supplier of Canadian equities first trying to sell them to Canadian taxable corporations, secondly to Canadian individuals, thirdly to American corporations and individuals, then to Canadian pension funds, and finally to American pension funds.

FIGURE 1

SUPPLY AND DEMAND FOR FUNDS USING ALTERNATIVE TYPES OF SECURITIES



Given that we observe Canadian pension funds holding substantial volumes of Canadian common stock, and in some cases, Canadian common shares being purchased by American pension funds, we can safely conclude that the relevant marginal tax rate for calculating the cost of capital on common stock is the tax rate that the owners of the pension fund pay (in present value terms) on the income they earn on such investments. This is likely to be substantially less than the top marginal tax rate for individuals and is more likely to be less than 30 percent.[7]

From Table 10, we see that in the case of preferred shares, the suppliers of these shares would first try to sell them to taxable Canadian corporations. Once the demand for preferred shares by Canadian taxable corporations was saturated, they would then try to sell them to individual investors. Finally, they would try to market these preferred shares to pension funds (Panel C, Figure 1). At the present time in Canada few, if any, preferred shares are held by pension funds. Hence, we can conclude that the relevant marginal tax rate for determining the cost of funds through the issuing of preferred shares is somewhere between that of the fully taxable corporation (50 percent) and the average marginal tax rates of individual investors.

IV. EFFECTS OF CHANGES IN THE COVERAGE OF THE DIVIDEND TAX CREDIT

The first proposal we wish to consider is the likely impact of extending the dividend tax credit to pension funds and, because they have no tax liabilities, made refundable to them.

The initial impact would be that the rate of return required by the Canadian pension funds would fall from being approximately equal to the nominal interest rate in corporate bonds to about two thirds of the corporate bond yield. There would be a substantial shift in the holding of both common and preferred stock from individuals and corporations to pension funds. At the same time this would cause those corporations seeking funding to increase the supply of both types of shares and reduce the supply of corporate bonds.

If the dividend tax credit were also extended to the owners of foreign owned companies in Canada the loss in revenues could be substantial. In 1983 the cost to provide the DTC to U.S. residents alone would have been in excess of $680 million.[8] At the same time though, it would increase the yield to foreign owners of Canadian equities and would stimulate their demand for Canadian shares by foreign investors.

If the dividend tax credit were extended to both Canadian pension funds and foreign investors, then the ultimate effect would likely be an increase in the price of Canadian shares and ultimately a decrease in the debt equity ratio of Canadian companies. Because the supply of foreign savings is considerably more elastic than the supply of Canadian pension fund savings, it is likely that the share of foreign ownership would rise in Canada.

Currently the dividend tax credit appears to be generating essentially inframarginal gain to individuals in Canada who hold common stock. If the marginal investors in Canadian common stock are pension funds, then the dividend tax credit is unlikely to increase the total amount of equity held by Canadians but will simply cause Canadian individuals to switch their portfolio of financial assets away from bonds towards equity. This readjustment of individual portfolios will result in Canadians bearing more than an optimal amount of risk.

Because this subsidy induces an economically inefficient allocation of Canadian investment portfolios there will be an economic cost associated with this subsidy. This economic cost can be measured as approximately one half of the change in the holdings of equity by individuals that is stimulated by the dividend tax credit times the

subsidy provided by the dividend tax credit. For example, if the elasticity of supply of savings facing the equity market is 0.5 with respect to the rate of return on Canadian equities to Canadian individuals, the 33.3 percent dividend tax credit would increase the holdings of shares in the hands of Canadians by about 16.65 percent. The total value of Canadian shares held by the public in 1983 was about $150 billion.[9] Using these variables the economic cost of such a policy can be estimated as 1/2 (change in equity holdings)(value of DTC) or 1/2 x ($150B x .1665) x 3/2 x r_e x 1/3. If r_e in 1983 was about 8 percent (nominal), then the value of the economic waste created by the dividend tax credit was approximately $500 million in that year. This is an annual economic loss to the economy.

V. ADMINISTRATIVE AND COMPLIANCE COST OF PREFERRED SHARES

The efficiency of preferred shares as a method of transfering potential losses from non-taxable companies to taxable companies and individuals is made up of essentially three components. First, there is the amount of benefit the issuer receives through a lower cost of capital as compared to the revenue cost of the instrument to the government. Second, there is the administration and legal cost of complying with the rules and regulations concerning the issuance of preferred shares. Third, there is the administration and marketing cost of the instrument.

Previously it was explained that when a corporation sells shares to the public it gives up potential tax losses equal to the corporation's tax rate (tc) times the interest rate it would have had to pay to borrow (i) times the amount of funds raised by the equity issued. In return, the government gives the individuals who purchase the stock a tax credit equal to 33 1/3 percent of the grossed-up dividends paid. In the situations where the debtor corporation first sells its stock to another corporation, then the second corporation can reduce its taxes by an amount equal to the corporate rate (tc) it faces times the amount of interest it would have otherwise earned. This reduction in taxes is generally larger than the value of the DTC received by individuals, i.e. (tc > .333).

If the market for preferred shares were solely determined by transactions between corporations, then we would expect to find that the dividend rate on preferred shares would be approximately one-half the normal interest rate on corporate bonds. This was approximately the case in the middle 1970s when this tax preference was extended to term preferred shares.[10] In Table 11, an example of four issues of preferred shares made in 1984 are presented. In each case the dividend rate (Column 5) is approximately 70 percent of the prime interest rate.

As the three non-bank borrowers would probably have had to pay slightly over prime on debt, a dividend of 70 to 73 percent of the prime rate probably represents approximately 66 percent of what they otherwise would have had to pay for debt.

TABLE 11

TERMS AND CONDITIONS OF PREFERRED SHARES

1 Issue Date	2 Issuer	3 Amount ($ Million)	4 Issue Price	5 Dividend	6 Redemption Date	7 Feature Price	8 Spread
2/29/84	Trans Alta Utilities	65	25.00	8.40%	3.27/89	26.00	2.80
4/ 3/84	Bank of Nova Scotia	250	25.00	.70 of Prime	7/15/91	26.00	3.00
7/12/84	Aluminum Company Co. of Canada	105	25.00	.73 of Prime 8.5% Minimum	1/01/88	26.50	1.75
8/16/85	Northern Telecom Ltd.	200	25.00	.70 of Prime	8/29/87	25.00	1 to 2%

Source: Investment Dealers Association, Toronto, Ontario

To the degree that preferred shares are sold to corporate lenders and yet are required to pay a rate of dividend greater than (1-tc)i, there is a transfer of tax revenues going between the government and the purchaser of the bonds that is not benefiting the initial issuer. The initial issuer does not benefit because the price of the preferred shares is being set by individual Canadian investors or foreign investors who require a higher return than many Canadian corporations would have been willing to accept. On the other hand, in the case of the sales made to the public, it would appear that the full benefit of the dividend tax credit (less issuing costs) is being captured by the issuer. The difference between the corporate tax rate (46 to 50 percent) and the rate of the DTC measures the unnecessary transfer of revenue from the Government to the corporations who will hold these shares.

Corporations in 1983 held approximately 17 billion of preferred shares with a dividend rate of approximately 8.00 percent.[11] If the average corporate holder of these shares has a tax rate of 48 percent, and the dividends on the preferred shares are below the cost of borrowing the amount of the dividend tax credit, then the amount of this unnecessary transfer would have been equal to: (preferred shares outstanding)(dividend rate)(tc - DTC) or \$17B(.08)(.50 - .32) = \$231 million in 1983. Such an annual loss in tax revenues will grow with the amount of preferred shares held by corporations.

This tax loss is a subsidy to the corporation buying the shares and will not be passed through to the issuer. If instead of the tax free

status of intercorporate dividends the government were to simply give the dividend tax credit on such dividends, this windfall would be eliminated. If such a change were made in the tax treatment of dividends then we would expect to find that a larger proportion of the preferred shares would be sold to the public and a smaller fraction to corporations.

Depending on the size of the issue, the associated legal and compliance cost of issuing shares generally ranges between 1 1/2 to 3 percent more than the cost of issuing corporate bonds.[12] This is an economic cost to the issuing of term preferred shares and can rightly be computed as part of the cost of giving tax loss refundability in this indirect manner. In addition to these legal and compliance costs, there is the selling costs of the brokers as measured in Column 8 by the spread of the preferred shares. For this sample of four (and several others that were examined), we find that the spread ranges between one and three percentage points. It would appear again that most of the shares have a spread of approximately 2 to 2 1/2 percentage points.

Adding the legal and compliance costs to the spread, we find that the total administrative and compliance cost of issuing preferred shares is in the order of 3 1/2 to 5 1/2 percentage points of the funds raised. These costs do not appear to be excessive given that the normal cost of raising taxes, including compliance costs, is in the same order of magnitude. This conclusion does not mean, however, that more should not be done to reduce the transactions costs associated with this financial instrument.

If the government wishes to use preferred shares as a way of providing limited tax loss refundability, it should endeavor to reduce the administration and compliance costs associated with these instruments. One way would be to eliminate the non-taxable nature of intercorporate dividends and apply the dividend tax credit to all such dividends whether received by the corporation or by individuals. By doing this, the revenue loss of the preferred shares would be reduced.

One of the principal difficulties of using preferred shares and term preferred shares as a method of limited tax refundability is that they become a vehicle for crown corporations to obtain low cost funding. To overcome this it is recommended that no dividend tax credit or tax free treatment of intercorporate dividends be provided for dividends paid by corporations with more than a 10 percent government ownership. This would mean that the unintended revenue loss caused by the tax planning of crown corporations would be eliminated. If this provision were enacted then it might be possible to allow the reintroduction of term preferred shares for genuine private sector corporations.

At the present time, related Canadian corporations are not allowed to file a consolidated tax return. It is quite possible to have losses arising in a subsidiary while the parent has taxable income. In such a case, if the subsidiary could issue term preferred shares to the parent for financing, this would facilitate the transferring of tax losses from the subsidiary to the parent and thus provide a more balanced

taxation of the overall conglomerate. Because term preferred shares tend to have been more efficient with a lower level of cost associated with them than ordinary preferred shares, measures should be taken to move in this direction if it is thought to be desirable to increase the level of tax loss refundability in the Canadian Corporate Income Tax System.

SUMMARY AND RECOMMENDATIONS

The dividend tax credit is an expensive subsidy to induce Canadians to hold equity rather than other forms of financial assets. Representing an annual revenue loss of approximately $1 billion, it is a tax provision that deserves close and continuous scrutiny by budget makers.

This loss in tax revenue is not just an income transfer but induces a misallocation of assets in the investment portfolios of individuals and corporations that has a cost in terms of additional risk of approximately $500 million a year. Part of the revenue loss is used to compensate for the higher administrative and compliance costs of issuing shares as compared to debt. These costs amount to a one time cost of approximately 3 to 5 percent of the issue value of the shares.

Although the dividend tax credit has been designed to provide a subsidy for Canadians to hold shares, one of its most important effects has been to allow a degree of refundability of tax losses for corporations. Because this instrument was designed for other purposes it is not ideally suited, and perhaps highly discriminatory, in providing tax relief to corporations for losses.

If the potential cost of extending the dividend tax credit to foreign investors could be avoided, there is a strong case for dropping the current system and substituting an advance corporate tax in its place. Such a system would levy a tax on corporations as a percentage of dividends paid. These tax payments could then be used by the corporation as a credit against normal corporation income tax liabilities and at the same time would allow individuals to take a credit at this rate (on grossed-up dividends) against personal income taxes due.

Such a system would make sure that a corporation had paid taxes on its total profits of an amount at least equal to what individuals have received as a dividend tax credit. It would eliminate the use of preferred shares as a tax loss refunding device and would ensure that no tax credit was provided at the personal level unless at least an equal amount of tax was paid by the corporation.

This would be by far the preferred solution, provided that Canada could resist requests from the United States to pass the dividend tax credit through to its residents who have invested in Canada. While there is considerable speculation that such payments would have to be made, the matter is clearly subject to negotiation. Given that Canada presently has a dividend tax credit system, changes in its structure might be possible without changes in the tax treatment of foreign investors in Canada.

If a less ambitious reform were to be contemplated, then the clear second choice would be to reduce the rate of dividend tax credit. If the rate could be reduced from 33 1/3 to 25 percent of the grossed-up dividends and the dividend distributions tax on small business eliminated, a significant simplification could be made of the tax system for small business. It is this option that has been recently proposed by the Minister of Finance in his budget of February, 1986.

At the same time the dividend tax credit provision should be eliminated on dividends paid by corporations where governments have a controlling interest. Allowing the dividend tax credit to be used by government owned Corporations essentially results in their receiving an additional subsidy outside of the normal government budget process. As they have never paid significant corporate income taxes in Canada, they are for practical purposes tax exempt. When they also are made eligible

for the dividend tax credit they can issue preferred shares and get an unwarranted measure of tax loss refundability. This is both bad tax policy and bad financial policy for the control of government owned enterprises. These recommendations for reform of the dividend tax credit would remove many of the most damaging outcomes of this feature of the Canadian income tax system.

FOOTNOTES

1. The DTC was limited at first to dividends paid on common stocks, but it soon proved impossible to distinguish between common and preferred stocks. Hence, the credit was allowed against all dividends (Perry 1955:345).

2. One half of all realized capital gains had to be included in income. Private firms were relieved from double taxation of this investment income through a 25% refund tax credit when investment income was distributed to shareholders.

3. Honourable Allen J. MacEachen, Deputy Prime Minister and Minister of Finance, Budget Speech, November 12, 1981.

4. This is estimated as follows: (Table 4 row 11 - Table 4 row 10) tax rate of small CCPC = (50 - 43.75)/25 = .25.

5. William R. Lawlor, "Income Debentures and Term-Preferred Shares," Canadian Tax Journal, Vol. XXXVI, No. 2, 1978, pp. 201-216.

6. The rate of dividends would only have to be approximately 1/2 of the interest rate on debt if the preferred shares were sold to a large taxable corporation such as a bank. If sold to the public the 33 1/3 dividend tax credit would reduce the required rate of dividend by 1/3 of the corresponding interest rate on debt.

7. Suppose a taxpayer is in a 50 percent tax bracket when he retires. The present value of taxes he would pay on a 10-year annuity (purchased 30 years before and taxed only at the time the annuity pays a pension with a full deduction allowed for the initial purchase of the annuity) is equivalent to a 23 percent tax rate on the interest earned on the build-up of the annuity over a 30-year period. In the case where tax is paid on the internal build-up of the annuity, it is assumed that taxes would be paid on the interest each year as it accrues and no tax would be levied on the pension from the annuity. The rate of interest is assumed to be 10 percent per annum.

8. The total dividends paid to U.S. residents who hold investments in Canada amounted to $1,362 million U.S. U.S. Department of Commerce, Survey of Current Business, August 1, 1984.

9. Statistics Canada, Financial Flow Accounts, Catalogue 13-002, 1984, pp. 143-144.

10. William R. Lawlor (1978), op cit.

11. Statistics Canada, Financial Institutions, Catalogue 61-006, 1984, pp. 32-202.

    Statistics Canada, Financial Flow Accounts, Catalgoue 13-002, 1984, pp. 47-48.

12. This estimate is based from interviews with the Toronto Stock Exchange Investment Dealers Association, The Underwriting Depts. of Brokerage Houses, and the Ontario Securities Commission.

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